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KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

JONES, HEATHER RAE

ART UNIT	PAPER NUMBER
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2621

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcarter@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No. 10/603,357	Applicant(s) BRAUN ET AL.	
	Examiner HEATHER R. JONES	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 and 07 April 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/8/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 8, 2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 21-53 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 44-48 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 44-48 define a tangible computer-readable medium embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium

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and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). In the state of the art, transitory signals are commonplace as a medium for transmitting computer instruction and thus, in the absence of any evidence to the contrary and give the broadest reasonable interpretation, the scope of a "tangible computer readable medium" covers a signal per se. The Examiner recommends amending the “tangible computer-readable medium” to --non-transitory computer-readable medium-- to exclude all non-statutory storage mediums.

Claim Objections

4. Claim 26 is objected to because of the following informalities: claim 26 depends from claim 1, which has been canceled. For the purpose of examining, the Examiner is going to conclude that claim 26 is supposed to depend from claim 21. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21-41 and 43-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers et al. (U.S. Patent Application Publication 2003/0236581) in view of Suzuki et al. (U.S. Patent 6,245,982).

Regarding claim **21**, Chambers et al. discloses a method of providing synchronization of a video presentation with an audio presentation, comprising: providing for display on a user system an interactive user interface (Figs. 3-5), the interactive user interface including: an audio waveform corresponding to digital samples of audio over time (Fig. 3); time information displayed in association with the audio waveform (time information can be seen on the x-axis of the audio waveform diagram in the window (104) in Fig. 3). However, Chambers et al. fails to disclose a cue insertion interface that enables a user to insert cue at one or more locations with respect to the audio waveform, wherein the cue is configured to cause a modification with respect to the abstract visual presentation in synchronization with the audio presentation when played back; receiving a first signal from a user input device to designate a cue at a first location with respect to the audio waveform; and storing the designated cue in computer readable memory.

Referring to the Suzuki et al. reference, Suzuki et al. discloses a method of providing synchronization of a video presentation with an audio presentation, comprising: a method of providing synchronization of a video presentation with an audio presentation (Figs. 6, 8, and 9), comprising: a cue insertion interface that enables a user to insert cue at one or more locations with respect to the audio waveform (Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene

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components (cues) can be edited according to the user's liking), wherein the cue is configured to cause a modification with respect to the abstract visual presentation in synchronization with the audio presentation when played back (col. 18, lines 14-26 - the motion waveform is changed according to the motion components); receiving a first signal from a user input device to designate a cue at a first location with respect to the audio waveform (Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking); and storing the designated cue in computer readable memory (col. 14, lines 8-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have allowed the user to edit and insert cues along the audio waveform as disclosed by Suzuki et al. in the method disclosed by Chambers et al. in order to modify the visual presentation of the audio during playback to further engage the user.

Regarding claim **22**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising providing for display via the interactive user interface at least left and right audio channel waveforms (Chambers et al.: Figs. 3-5 – reference characters (106) and (108) along with (104) display the left and right channels; paragraph [0097]).

Regarding claim **23**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21, but fails to explicitly disclose that the first signal indicates the beginning of a guitar rift. However, Suzuki et al. discloses in Fig. 9 capturing the waveform of the guitarist (col. 14, lines 25-36). Suzuki et al. also discloses a cue insertion interface that enables a user to insert cue at one or more locations with respect to the audio waveform (Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking). Therefore, the user would be able to insert a cue to mark the guitar if one desired.

Regarding claim **24**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising automatically inserting at least one cue with respect to the audio based at least in part on a signal received from an automated lighting system used to light a live performance (Suzuki et al.: Fig. 9 – section 81; col. 2, lines 35-43; col. 14, lines 37-53).

Regarding claim **25**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claims 21 and 24 including that the signal from the automated lighting system is a spotlight-on signal, a spotlight color signal, or a spotlight position signal (Suzuki et al: Fig. 9 – section

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81 - this signal signifies when the spotlight was on; col. 2, lines 35-43; col. 14, lines 37-53).

Regarding claim **26**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising inserting at least one cue with respect to the audio based at least in part on monitoring of stage lighting effects (Suzuki et al: Fig. 9 – section 81 - this signal signifies when the spotlight was on; col. 2, lines 35-43; col. 14, lines 37-53).

Regarding claim **27**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising inserting at least one cue with respect to the audio based at least in part on a singer's singing (Suzuki et al.: Fig. 9 - section (81) – the singers are monitored - Chorus (P4); Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking).

Regarding claim **28**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising inserting at least one cue with respect to the audio based at least in part on information from a microphone and/or based at least in

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part on information from a vibration sensor located on or near an instrument (Suzuki et al.: Figs. 4A-4C, 7A-7E, and 8; col. 8, line 57 – col. 9, line 61).

Regarding claim **29**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising inserting at least one cue with respect to the audio based at least in part on a filter analysis on the power of a plurality of audio frequency bands (Suzuki et al: col. 17, lines 50-67).

Regarding claim **30**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claims 21 and 29 including that the filter analysis cue includes a value to indicate an audio frequency band's strength over an interval of time (Suzuki et al: col. 17, lines 50-67).

Regarding claim **31**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claims 21 and 29 including that the filter analysis cue includes an indication that a signal of a selected frequency component of having a strength above a predetermined threshold value is present in the audio waveform (Suzuki et al: col. 17, lines 50-67 – threshold “k”).

Regarding claim **32**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising using mixing board automation to generate at least one cue (Chambers et al.: paragraph [0005]).

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Regarding claim **33**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising using a track pan value to generate a cue (Chambers et al.: the track pan value can be determined from looking at the distribution of the left and right channels as seen in Figs. 3-5).

Regarding claim **34**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprising using track fader adjustments, bus volume, and/or effects send and return levels to generate one or more cues (Suzuki et al.: col. 18, lines 14-26 - volume).

Regarding claim **35**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21, but fails to disclose that the method further comprises using an output from a reverb device and/or compressor device to generate one or more cues. Official Notice is taken that it is well known in the art to have used an output from a reverb device and/or compressor device to generate one or more cues. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used an output from a reverb device and/or compressor device to generate one or more cues in the method disclosed by Chambers et al. in view of Suzuki et al. in order to enhance the visual display during playback.

Regarding claim **36**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21, but fails to

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disclose that the method further comprises providing for display text describing the cue with the cue, and providing for display abbreviated text describing a second cue in association with the second cue, wherein the abbreviation is performed at partly in response to a spacing of the second cue with respect to another cue. Official Notice is taken that it is well-known in the art to add text to a display to explain what is going on. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added text to the display in the method disclosed by Chambers et al. in view of Suzuki et al. in order to notify the user of what is going on during the audio presentation, which will further enhance the user's experience.

Regarding claim **37**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21, but fails to disclose that the designated cue is a rotation cue indicating a rotation speed of at least a first displayed object. Official Notice is taken that it is well-known in the art to have a rotation cue indicating a rotation speed of at least a first displayed object. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added a rotation cue in the method disclosed by Chambers et al. in view of Suzuki et al. in order to enhance the user's experience.

Regarding claim **38**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the cue is a mood cue (Suzuki et al.: col. 15, lines 17-30 – effects-applying

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processes - all of these effect applying processes will create a certain mood for the viewer when the viewer plays back the presentation).

Regarding claim **39**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the designated cue indicates the location of a beat in the audio waveform (Suzuki et al.: col. 17, lines 50-67 – beats are part of the tempo of the music).

Regarding claim **40**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the cue includes a cue identifier indicating a cue type and data indicating a visualization engine that the cue identifier follows (Suzuki et al.: Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking).

Regarding claim **41**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the designated cue is included in a file separate from the audio presentation (Suzuki et al.: col. 17, lines 39-49 – each motion component is stored in the motion database, which is separate from the music file). However, Chambers et al. in view of Suzuki et al. fails to disclose that the method further comprises accessing the file over a network separately from the audio. Official Notice is taken that it is well known in the art to access files over a network. Therefore, it would have

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been obvious to one of ordinary skill in the art at the time the invention was made to have accessed the file containing the cues over a network in the method disclosed by Chambers et al. in view of Suzuki et al. in order to allow the method to be more versatile and user friendly by allowing the user to have access to more files that can be found over a network.

Regarding claim **43**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 21 including that the method further comprises: accessing the designated cue from memory; accessing the digital audio samples from memory; providing the audio presentation for display in association with the visual presentation using the designated cue (Suzuki et al.: Fig. 6 – two types of cues can be seen being used to designate information, the arrows and the bars; col. 12, line 30 – col. 13, line 3 - the operator can edit the cues; col. 13, line 28 - col. 15, line 38 - motion and scene components (cues) can be edited according to the user's liking; col. 17, lines 39-49 – playback; col. 18, lines 14-26 - the motion waveform is changed according to the motion components).,

Regarding claims **44-48**, these are medium claims corresponding to the method claims 21, 22, 24, 40, and 41 respectively. Therefore, claims 44-48 are analyzed and rejected as previously discussed with respect to claims 21, 22, 24, 40, and 41.

Regarding claims **49-53**, these are apparatus claims corresponding to the method claims 21, 22, 24, 40, and 41 respectively. Therefore, claims 49-53 are

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analyzed and rejected as previously discussed with respect to claims 21, 22, 24, 40, and 41.

7. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chambers et al. in view of Suzuki et al. as applied to claim 21, and further in view of Nishitani et al. (U.S. Patent 7,161,079).

Regarding claim **42**, Chambers et al. in view of Suzuki et al. discloses all the limitations as previously discussed with respect to claim 1, but fails to disclose that the designated cue is included embedded with the audio presentation.

Referring to the Nishitani et al. reference, Nishitani et al. discloses a method wherein the designated cue is included embedded with the audio presentation (Fig. 6; col. 8, lines 29-37).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have embedded the cues with the audio presentation as disclosed by Nishitani et al. instead of in a separate file as disclosed by Suzuki et al. in order to easily correlate the audio sample with the cue rather than having to read two separate files and trying to correlate them. Also, embedding the cues into the audio presentation allows the cues to always be accessible because if they were stored in a separate location the other location may be unavailable for some reason.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER R. JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones
Examiner
Art Unit 2621

HRJ
December 20, 2009

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621